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SCHEMATICS ABBREVIATIONS THEIR FULL FORM AND MEANING

Schematics Diagrams have a lot of information, in order not to congest the document; much of the information is displayed in codes, symbol and abbreviations. That means for you to effectively read schematics diagrams you will need to understand the full form and meaning of the abbreviations in the schematics diagrams

The table below show most schematics abbreviations their full form and meaning.

For Inquiries, Email: platinumphonesug@gmail.com / website

1.	KBC		Embedded control chip on the Motherboard
2.	#	Hash tag	Usually used in schematics to represent that the signal is active without voltage
3.	@	@	Used In schematics to represent a component that is not installed on motherboard
4.	3V_5V_POK	3.3V 5V Power Ok	A signal that indicates when 3.3V and 5V power are out and fine
5.	AC	Alternating Current	Voltage from charger
6.	ACOK	AC Voltage Ok	Indicating when the power from the charger is fine
7.	ACPRESENT	Alternating Current Present	Signal that indicating that the charger is present
8.	ADP	Adapter	Laptop charger
9.	ALL_SYS_PWRGD	All System Power Good	A signal that indicates when all voltages except that of CPU is up and fine
10.	ALW	Always	Voltage that is present on motherboard throughout even when the laptop is shutdown
11.	BAT	Battery	Battery connector or power

12.	BATLOW#	Battery Low	Signal indicating when battery is low, Its active when the voltage is zero
13.	BIOS	Basic Input and Output Software	The software program that controls the turn on process of components until windows takes over
14.	BL	Back Light	Backlight
15.	BLKT	Back Light	Screen or Keyboard light

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12.	BATLOW#	Battery Low	Signal indicating when battery is low, Its active when the voltage is zero
13.	BIOS	Basic Input and Output Software	The software program that controls the turn on process of components until windows takes over
14.	BL	Back Light	Backlight
15.	BLKT	Back Light	Screen or Keyboard light
16.	BOOT	BOOT	5V power for internal voltage regulators in power supply chips
17.	BST	BST	5V power for internal voltage regulators in power supply chips
18.	BT	Bluetooth	Bluetooth
19.	BTN	Button	Button
20.	C	Capacitor	Capacitor
21.	CHG	Charge	Charging
22.	CLK	Clock	Operating frequency
23.	CN	Connector	Connector
24.	CPU	Central Processing Unit	Processor
25.	CS	Current Sensor	Determining how much current is flowing
26.	CTL	Control	Control signal
27.	D	Diode	Diode
28.	D	Data	Data
29.	DC	Direct Current	Voltage from the battery
30.	DCIN	Direct Current Input	Where voltage from charger

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			co co
31.	DET	Detected	

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			connector and battery is connected on the motherboard
31.	DET	Detected	
32.	DIS	Discrete	On board graphics card
33.	DMA	Direct Memory Access	Direct Memory Access
34.	DN	Data Negative	Negative data line
35.	DP	Data Positive	Positive data line
36.	DRAMRST#	Dynamic RAM Reset	RAM turn on signal
37.	DRV	Drive	MOSFET drive signal connected to the gate
38.	DRVH2	Drive Voltage High 2	This is the high side of 5V MOSFET (connected to 19V) gate drive signal for voltage regulators like 3.3 & 5V chip
39.	DRVL1	Drive Voltage Low 1	This is the low side of 3.3v MOSFET (connected to ground) gate drive signal for voltage regulator like 3.3 & 5V chip
40.	DY	DY	Used In schematics to represent a component that is not installed on motherboard
41.	EC	Embedded Controller	Embedded control chip on the motherboard
42.	EDP	Embedded Display Port	Display sections like display port or screen display section
43.	Emmc	Embedded Multimedia Card	A chip that acts as a hard drive in portable device like phones or tablets
44.	EN	Enable	Power turn on signal
45.	FB	Feedback	Feedback voltage
46.	FREQ	Frequency	The rate at which current

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			changes direction per second
47.	GFX	GFX	On board graphics card

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			changes direction per second
47.	GFX	GFX	On board graphics card
48.	GND	Ground	Common negative plate found all over the motherboard
49.	GPU	Graphics Processing Unit	Onboard Graphics card or Image, video processing section in Processor
50.	H	High	3.3V logic voltage present
51.	HDA	High Definition Audio	Usually refers to sound in motherboard
52.	HDD	Hard Disk Drive	Hard disk
53.	INT	Initiate	Usually a signal to start operation
54.	IO	Input or Output	Input or Output
55.	KB	Keyboard	Keyboard
56.	KB_DET#	Key Board Detected	This signal voltage will go to zero to indicate that the keyboard is inserted
57.	L	Inductor / Coil	Coil
58.	L	Low	No voltage or zero voltage
59.	LCD	Liquid Crystal Display	Screen display
60.	LDO	Low Drop Out	Voltage that usually comes out before laptop turns on
61.	LID	Lid	Top laptop housing which contains the sensor that sense when the laptop is closed
62.	LVDS	Low Voltage Deferential Signaling	3.3v Screen power voltage
63.	MEM	Memory	Usually indicating RAM

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64.	MIC	Microphone	Microphone

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64.	MIC	Microphone	Microphone
65.	MISO	Master In Slave Out	Transfer of data from Bios chip to Chipset
66.	MOSI	Master Out Slave In	Transfer of information from chipset to Bios chip
67.	NC	Not Connected	Indicating when a pin or chip is not connected on the motherboard
68.	NTC	Negative Thermal Coefficient	Temperature sensing or sensors
69.	OC	Over Current	Excess current
70.	P	Power	Power
71.	PCH	Platform Control Hub	Chipset
72.	PCH_SMBDATA	Platform Control Hub System Management Data	Chipset system management data line used for chipset to communicate with other SMBUS components like Battery
73.	PECI	Platform Environment Control Interface	Platform Environment Control Interface
74.	PG	Power Good	3.3v Signal indicating when voltage is fine
75.	PGOOD	Power Good	Signal indicates when voltage output is fine
76.	PLT_RST	Platform Reset	Main turn on signal from processor to other component on the motherboard
77.	PM	Power Management	Power Management signals from chipset to KBC
78.	PM_PCH_PWROK	Power Management Chipset Power Ok	This signal indicated when chipset power is fine
79.	PROCHOT#	Processor Hot	Excessive heat at the processor, This voltage goes to zero when

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			th
80.	PS_ID	Power Supply Identification	Laptop Charger middle pin

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			the processor gets to hot
80.	PS_ID	Power Supply Identification	Laptop Charger middle pin
81.	PWM	Pulse Width Modulation	Alternating signal that turns on and off MOSFETs to set output voltage for example screen dim or brightness
82.	PWR	Power	Consider it as Another word for voltage
83.	PWR_BTN	Power Button	Power button
84.	PWROK	Power Ok	Voltage is good
85.	Q	MOSFET / Transistor	MOSFET / Transistor
86.	R	Resistor	Resistor
87.	RESET	reset	Turn on or off signal in digital electronics
88.	RF	Radio Frequency	Refers to wave signals like FM radio or phone network signals
89.	RMSRST#	RMS Reset	Chipset turn on signal from KBC
90.	RST	Reset	Turn on or off signal in digital electronics
91.	RTC	Real Time Clock	3.3V for the chipset usually from Bios battery or always power
92.	RTC_DET#	Real Time Clock Detected	This signal will drop down to zero to indicate that the Bios battery is detected
93.	RX	Receive	The processing of receiving information on motherboard
94.	S0	State 0	Power state where the laptop is fully on
95.	S3	State 3	Power state where laptop is in sleep mode usually with

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			voltage on RAM
96.	S4	State 4	P sh w
97.	S5	State 5	Power state where laptop is totally shutdown

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95.	S3	State 3	Power state where laptop is in sleep mode usually with

			voltage on RAM
96.	S4	State 4	Power state where laptop is shut off but plugged in either with a battery or charger
97.	S5	State 5	Power state where laptop is totally shutdown
98.	SATA	Serial Advanced Technology Attachment	Data transfer technology for hard drive and CD drive
99.	SHDN	Shutdown	Turn off
100.	Signal	Signal	The word Signal indicates a 3.3V logic level voltage
101.	SLP	Sleep	State of power
102.	SPI	Serial Peripheral Interface	Communication protocol used in short distance communication on motherboard, like Bios
103.	SPK	Speaker	Speaker
104.	SW	Switch	Switching
105.	SYS	System	Usually referring to motherboard
106.	THERM	Thermal	Represents temperature
107.	TP	Touch Pad	Touch pad
108.	TP	Test Point	Pin point for testing in the circuit
109.	TPM	Trusted Platform Module	A chip on motherboard that stores security passwords like for hard drive encryption
110.	TX	Transmit	The processing of sending information on motherboard
111.	U	Integrated Circuit	Motherboard letter indicating Integrated Circuit(IC) chips

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112.	UMA	UMA	Processor Integrated graphics
113.	USB	Universal Serial Bus	A data communication protocol used in USB ports
114.	V	Voltage	Voltage
115.	VCC	Voltage Collector	Positive voltage input
116.	VDD	Voltage Drain Drain	Positive power voltage
117.	VDDQPWRGOOD	VDDQ Power Good	Signal indicating when RAM power is fine
118.	VFB	Voltage Feedback	Part of the output voltage that goes back to the chip to let the chip know if the voltage is out and how much voltage
119.	VIN	Voltage Input	Positive voltage input
120.	VO	Voltage Output	Voltage output
121.	VOUT	Voltage Output	Output voltage
122.	VR_EN	Voltage Regulator Enable	A signal that turns on Processor power Chip
123.	VRAM	VRAM	Onboard graphics chip RAM
124.	VREG	Voltage Regulator	Voltage Regulator
125.	VREG3	3.3 Voltage Regulator	3.3 Voltage Regulator output
126.	VREG5	5V Voltage Regulator	5V Voltage Regulator output
127.	VSS	Voltage Source Source	Usually ground or negative
128.	VVT	VVT	Half of RAM volts to power part of the processor
129.	WP	Write Protect	Signal that restricts writing data to EEPROM like Bios chip
130.	X	Crystal Oscillator	Motherboard letter indicating a Crystal Oscillator

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